

Chapter 6 *Plan Monitoring, Maintenance & Revision*

Disaster Mitigation Act of 2000

§201.4(c)(5): A Plan Maintenance Process that includes:

- (i) An established method and schedule for monitoring, evaluating, and updating the plan.***
- (ii) A system for monitoring implementation of mitigation measures and project closeouts***
- (iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategies.***

§201.4 (d): Review and updates. Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible. We also encourage a State to review its plan in the post-disaster time frame to reflect changing priorities, but it is required."

6.1 Plan Monitoring Procedures

The *Emergency Operations Plan, Volume 2, Support Annex 3: Mitigation* was approved in 2001. This plan was prepared, as was the *2004 Commonwealth Emergency Operations Plan, Volume 2, Support Annex 3: Standard Hazard Mitigation Plan*, with the overall vision to reduce the exposure of the Commonwealth's citizens to the impacts of hazards. It was determined early in the planning process that given time constraints, the plan would only address natural hazards. Further, the task was narrowed to a focus on state facilities since few local plans had been initiated and timely funding of the entire portfolio of local plans seemed unlikely when the state planning process was initiated in 2002.

When considering continuity of critical operations in the context of state services and facilities, the impacts of natural hazards can be similar or identical to the potential impact of a human-caused event. For example, during Hurricane Isabel 5 million Virginians were without power, some for as long as two weeks. A human-caused event such as failure of a nuclear power plant due to operation error or terrorism would have similar impacts to the Commonwealth's critical facilities. In other words, a power outage is a power outage whether caused by downed lines and transformers from debris or mechanical failure. While the plan does not specifically consider human-caused hazards, the "cross-walk" to continuity of critical operations demonstrates that many of the strategies and projects included in the plan also strongly support reduction of exposure to human-caused hazards.

The mitigation plan was developed following an extensive identification and inventory of state facilities. Subsequently, the most significant natural hazards were characterized. An analysis of the Commonwealth's natural hazards and the historical occurrence of



significant events resulting in vulnerability were determined. Once key state facilities were targeted as “vulnerable” to natural hazards, agencies and organizations could then organize mitigation approaches into a Mitigation Vision for the Commonwealth, four key goals, and objectives to support accomplishment of the goals. Strategies and projects were then submitted into the database to complete the strategy.

The 2004 plan represented a “snapshot” of known state facilities as of late 2003. This plan was been revised and resubmitted to FEMA for approval November 10, 2006. FEMA approval was received and “enhanced status” gained on March 14, 2007. The plan is being revised again and re-submitted in April, 2008 to obtain 90% federal cost-share funding for the Severe Repetitive Loss and Flood Mitigation Assistance Programs per guidance released by FEMA January 14, 2008. The revised planning process is based on a Hazard Identification and Risk Assessment (HIRA) that includes the data sets from 27 local §322 plans. In addition, numerous gaps in the state data set and the resolution of identified problems with data are included in the objectives, strategies and projects which are listed within the Information and Data Goal.

This 2006 revised plan has not been expanded, as originally intended, to specifically include human-caused hazards due to lack of data. In addition, the Commonwealth’s Terrorism Plan, Volume 4 of the EOP, was revised in September, 2006. The FEMA proposed Standard Plan guidelines do not specifically require inclusion of human-caused hazards in the revision. Addressing continual coordination between the human-caused hazard community and the natural hazard community will be a focus of the reformatted Mitigation Steering Committee and VDEM Mitigation Planning staff during the 2007 – 2010 planning cycle. This current revision does, nevertheless, incorporate additional local data which provides a comprehensive HIRA that inspires a more complete Plan.

6.1.1 Tracking Strategies and Projects

The Commonwealth of Virginia Hazard Mitigation Plan provides guidance for hazard mitigation within the Commonwealth. Its vision is supported by goals, objectives and strategies for Virginia state government that will reduce or prevent injury from natural hazards to citizens and critical state facilities. The 100 strategies and projects that support the objectives organized within the four goal groups were submitted by Virginia state agencies, colleges and universities along with federal agency cooperators and related organizations. These strategies and projects were submitted through a web site created at the Virginia Tech Center for Geospatial Information technology specifically to support the Virginia Hazard Mitigation Plan. As described in part 4.2 of Chapter 4.0, the “Vision, Goals, Objectives, and Strategies and Projects” section, projects were prioritized through an on-line ranking process. To facilitate this, the site was available for project data entry from mid-May through July 1, 2004. The site was closed to new strategy or project data entry during July, 2004 to allow for strategy and project ranking.

Once the ranking was completed, strategy and project data entry resumed. New strategies and projects could not be ranked in time for prioritization in the 2004 plan, but additional projects and strategies that were submitted after the initial strategy and project set were ranked and included in the complete listing within Appendix H.

As state hazard mitigation plans must be revised three years after FEMA approval, Virginia agencies that initiated a strategy or project were asked to report on the progress and accomplishments of each strategy and project during late summer, 2006. They were also asked to evaluate the relevance of goals, objectives, strategies and projects that were not accomplished due to inadequate funding or other barriers.



What was found was that the many of projects that were identified in the 2004 version of the state plan have been initiated. Due to funding constraints, strategies listed in the Structural Mitigation Goal were not completed. This is compounded by a lengthy Commonwealth of Virginia Capital Improvement Planning process tied to budget, design and engineering for construction of new buildings or retrofitting of existing building stock.

For the next plan update, the state mitigation plan will be informed by an improved HIRA that will not only include HIRA data from the 27 local §322 plans as well as information on human-caused hazards and the renewed priorities of the Commonwealth. The continued relevance of current goals, objectives, and strategies and projects will be evaluated during the development of the next plan revision. Agencies will continue to integrate mitigation activities with their planning efforts.

6.1.2 Mitigation Database Maintenance

The Center for Geospatial Information Technology, in consultation with the Virginia Information Technology Agency (VITA) and VDEM Mitigation staff, will continue to “host” the Mitigation Database. Through contractual support from VDEM as long as funding is feasible, the Center will maintain and update the database on a continual basis. It is anticipated that major aspects of this task during the first 24 months following plan approval will include:

- Continued development of protocol for local data input
- Inclusion of local §322 plan databases from local HIRAs
- Expansion of state hazard historical data
- Refinement of state agency facility inventories
- Continued expansion of database to target “critical facilities” to enhance COOP and human-caused vulnerability assessment

The two major aspects of Mitigation Database maintenance include the upload of local 322 databases and database expansion to include human-caused hazards. Both tasks are ongoing. Development of the 27 local plans varied in terms of time schedule and method. As the majority of the regional plans have received final FEMA approval, the HIRAs are currently being examined and consistent aspects of the local HIRAs are being expanded to determine a reasonable data upload methodology. This method will then be employed and tested. Once a usable protocol is discovered, tested and finalized, a schedule for uploading will be developed. Since the entire Commonwealth is now included in funded local jurisdiction or regional multi-jurisdictional plans, it is anticipated that local HIRAs can inform a new state HIRA by mid to late 2008, well within the anticipated schedule for the next state plan revision.

Expansion of the Mitigation Database to include human-caused hazards is less predictable. For this reason, a human-caused workgroup has been developed as one of the four standing sub-committees that assisted in overseeing implementation of elements of the 2004 state plan. Members of this sub-committee will continue to participate in the State Steering Committee with the goal of directing development of a human-caused annex to the next plan revision. The process to achieve this must be developed by the state Steering Committee since the *Interim Final Federal Rule, February 28, 2004* does not address human-caused hazards and a schedule for drafting, much less adoption of a Final Federal Rule was not been developed as of November 10, 2006. The draft policy document and accompanying crosswalk did not require that the Standard Plan address human-caused hazards. The *How-to-Guide* that addresses human-caused hazards, while helpful, is not policy or guidance and thus cannot fully guide this process. The State Steering committee will instead work to ensure that the state agencies responsible for management of human-caused hazards continue to be linked to the Mitigation



Steering Committee. This will include the Office of Commonwealth Preparedness and agencies of the Secretary of Public Safety.

A number of the Commonwealth's local governments have already incorporated human caused mitigation planning in their hazard mitigation plans. Hazardous Material Spills are also identified in a number of these 322 plans. Based on the expressions of interest that were received by state mitigation staff, it appears that the majority of local hazard mitigation plan revisions will address man-made hazards.

6.2 Plan Maintenance

The State Steering Committee was created to support development of the plan during summer, 2003. While planning committees are generally limited to twenty participants or less, the Commonwealth broadened the committee to include all who participated by attending Steering Committee Meetings, entered projects, provided information and reviewed the plan draft. Commonwealth staff emphasized participation in the manner that was appropriate for each agency and organization.

With completion of the plan draft, the sub-committee structure was revised to:

- **facilitate** plan implementation;
- **broaden** the database to include data input from local plans;
- **expand** the planning process to address human-caused hazards;
- **target** hazard mitigation education; and
- **support** modification of state facilities to minimize impacts from hazards.

Standing, ad-hoc Mitigation Sub-Committees will be convened, surveyed or engaged as necessary. These sub-committees are:

1. Mitigation Database Expansion and Refinement
2. Structural Mitigation Project Advisors
3. Planning and Policy
4. Assessment of Human-caused Hazards

Department of Emergency Management staff, in consultation with key state agencies, federal partners and organizations will continue to direct implementation of the plan. The Department of Emergency Management serves as the lead coordinating agency for emergency management in the Commonwealth, and thus will continue to lead the mitigation planning effort, including plan maintenance.

During the 2-year period immediately following the adoption of the 2004 approved plan, emphasis was placed on the implementation of those strategies and projects that were ranked "critical." This necessitated, in part, a comprehensive funding strategy using funds from traditional sources as well as from capital improvement efforts and non-traditional funding sources. VDEM mitigation planning staff and the Virginia Tech Center for Geospatial Information Technology provided key organizational support to state agencies and sub-committees.

A similar plan maintenance procedure will be used following FEMA approval of the current plan. VDEM will track those projects that were identified in both the State Hazard Mitigation plan and in the local plans. The Commonwealth Mitigation Plan database (see Chapter 2, section 2.1) has been created and populated by the state mitigation staff (see Appendix 11 for a sample of this spreadsheet). This database, which lists jurisdiction specific mitigation strategies, records the type of project (i.e., elevation, zoning and landuse, or education), the estimated cost, the potential funding sources, the timeframe, and the 322 and FMA approval dates. The projects are also identified as being in one of



the four main mitigation categories of the State Hazard Mitigation Plan (Policy, Planning and Funding, Structural Mitigation, Information and Data Development, and Outreach and Education). Policies may need revision and in some cases legislation may be necessary to facilitate accomplishment of key mitigation strategies. Sub-committee functions will continue as necessary to support implementation efforts.

The planning process timeline will be revised continually during the next three years to ensure that the plan revision can be prepared and submitted to FEMA within the required three-year time period. Special attention will continue to be focused on ensuring that businesses and special interest groups are included and have an input into the plan revision. The planning process will emphasize the expanded vulnerability assessment of the database of local and state critical facilities, the incorporation of human-caused hazards and the re-development of strategies and projects to address the most vulnerable citizens and assets of the State. State or federal legislative, regulatory or rule changes or additions that have occurred during the period following approval of the 2004 plan have been integrated into the 2006 revision.

Should a specific plan element or section require revision or amendment prior to the subsequent plan revision due to state or federal legislation or policy change, VDEM staff will meet with all appropriate stakeholders and propose the change or addendum to FEMA as quickly as is practicable.

6.2.1 Reporting

An Interim Report will be developed now that the first evaluation of progress on accomplishment of goals, objectives, strategies and project has been completed. This report will describe progress to date and the planning process for developing the revised plan and will be posted on the VDEM and CGIT websites. It will also be distributed to mitigation stakeholders to stimulate discussion of mitigation and interest in future plan revisions. State agencies focused on reporting on specific projects and strategies ranked "critical" and "high."

The sponsors of projects and strategies funded through the FEMA Competitive Pre-Disaster Mitigation Program, the Flood Mitigation Assistance Program and the Hazard Mitigation Grant Program provide quarterly progress reporting to VDEM throughout the duration of the project. VDEM will seek to organize these reports into a quarterly summary that will be posted on the Mitigation Plan website hosted at the Virginia Tech Center for Geospatial Information Technology. Projects that support specific aspects of the Mitigation Plan will be earmarked on the quarterly summary so that those interested in progress monitoring can track the specific FEMA-funded initiatives that support the Mitigation Plan.

6.2.2 Expansion of Steering Committee

The Steering Committee first envisioned and convened during 2003 was composed of representatives from state agencies, state colleges and universities, partner federal agencies and related organizations. Since the plan focused on state facilities, this was an appropriate group of stakeholders to provide data and create a mitigation vision with appropriate goals, objectives, strategies and projects. The committee was hindered, at times, by its size. More than 150 agency and organization stakeholders participated in the one-year planning process.

The 2007 Steering Committee membership will be revised to support not only implementation of this current Standard Mitigation Plan but to inform the eventual plan update. Revisions will include local plan critical facilities locations depicted in local HIRAs as well as priority local mitigation projects. Anticipated stakeholders that are to be



included in the Steering Committee will include local government and Planning District Commissions to ensure that local plan stakeholders are also represented. Invitees include representatives of the following organizations:

Department of General Services;
Virginia Tech – CGIT;
Virginia Department of Emergency Management/Emergency Operations Center;
State Corporation Commission/Bureau of Insurance;
Department of Conservation and Recreation;
NOAA/National Weather Service;
Army Corps of Engineers;
Department of Corrections;
Department of Health;
Department of Fire Programs;
Department of Transportation;
Department of Education;
Department of Housing and Community Development
Virginia Commonwealth University;
Thomas Jefferson Planning District Commission;
Commonwealth Regional Council;
City of Virginia Beach Fire/Office of Emergency Management;
Virginia Department of Social Services; and
American Red Cross.
Virginia State University-DRU
Virginia Tech University – DRU
University of Virginia-DRU
Virginia Emergency Managers Association
Virginia Association of Planning District Commissions
Virginia Association of Counties
VA Municipal League
Virginia Governmental Managers Association
VA Building & Code Officials
Chamber of Commerce
Industry and Trade Organizations
USDA Natural Resource Conservation Service
USGS
HUD

Table 6-1 Schedule for Plan Maintenance and Revision

Task	Responsibility	Time Frame
1. Complete expansion of approved [September 28, 2004] Standard Mitigation Plan and the Virginia Hazard Mitigation Program to "Enhanced" Status	VDEM Mitigation Staff FEMA Region III Cooperating Virginia State Agencies	Submit, November 2006 Approved 3/14/2007
2. Refine Planning Process and timeline for new plan development	VDEM Mitigation Staff Planning and Public Policy Sub-committee	Ongoing
3. Expand data base	VA Tech CGIT Database Expansion &	Initiated Fall, 2005



	Refinement Sub-Committee	Ongoing
4. Pursue annual Pre-Disaster Mitigation Program Funding for "Critical" and "High" ranked strategies and projects. Continue to pursue other FEMA funding as available	VDEM Mitigation Staff Project sponsors	Ongoing
5. Continue working with local plan and state contacts on plan implementation – use the VDEM Mitigation Project Spreadsheet to track projects	VDEM Mitigation Staff Project sponsors	Initiated Fall, 2006 Ongoing
6. Use available tools and resources to mitigate against manmade hazards	VDEM Terrorism Staff and Hazard Mitigation Staff Geospatial Information System (GIS) database Commodity flow studies Local sample Hazmat Terrorism Consequence Management Plans State Agency COOP Plans	Ongoing
7. Convene the State Steering Committee Members to discuss plan implementation, the submittal of additional mitigation activities, and to lay the groundwork for future HIRA, Vulnerability Assessment and strategy changes to the State Plan	State Emergency Coordinator VDEM Mitigation Staff - ongoing HIRA Sub-Committee Members	Annually each January – Structural Sub-committee April 30, Spring 2008
8. Evaluate progress on "Critical and High" priority strategies and projects	VDEM Mitigation Staff Strategy & Project Sponsors	Summer, 2006 complete Summer, 2007 complete Summer, 2008 Summer 2009
9. Upload Local Plans	VA Tech CGIT VDEM Mitigation Staff	Complete, Winter 2008
10. Hazard Identification and Risk Assessment	VDEM Mitigation Staff VA Tech CGIT	Ongoing
11. Review current regulatory requirements for plan revision	VDEM Mitigation Staff Planning & Policy Sub-committee	Summer, 2008
12. Development of Mitigation Goals and Strategies	VDEM Mitigation Staff Steering Committee Members Strategy and Project Sponsors	Winter-Spring 2009
13. Draft Review	VDEM Mitigation Staff Steering Committee Members	September 1, 2009 – November 1, 2009
14. Submit new Revised All-Hazard Mitigation	State Emergency Coordinator	December 1,



Plan to FEMA

2009

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1. Complete expansion of approved [September 28, 2004] Standard Mitigation Plan and the Virginia Hazard Mitigation Program to "Enhanced" Status	VDEM Mitigation Staff FEMA Region III Cooperating Virginia State Agencies	Submit, November 2006
2. Expand data base	VA Tech CGIT Database Expansion & Refinement Sub-Committee	Initiated Fall, 2005 Ongoing
3. Pursue annual Pre-Disaster Mitigation Program Funding for "Critical" and "High" ranked strategies and projects. Continue to pursue other FEMA funding as available	VDEM Mitigation Staff Project sponsors	Ongoing
4. Continue working with local plan and state contacts on plan implementation – use the VDEM Mitigation Project Spreadsheet to track projects	VDEM Mitigation Staff Project sponsors	Initiated Fall, 2006 Ongoing
5. Use available tools and resources to mitigate against manmade hazards	VDEM Terrorism Staff and Hazard Mitigation Staff Geospatial Information System (GIS) database Commodity flow studies Local sample Hazmat Terrorism Consequence Management Plans State Agency COOP Plans	Ongoing
6. Convene the State Steering Committee Members to discuss plan implementation, the submittal of additional mitigation activities, and to lay the groundwork for future HIRA, Vulnerability Assessment and strategy changes to the State Plan	State Emergency Coordinator VDEM Mitigation Staff State Steering Committee Members	Winter, 2007
7. Evaluate progress on "Critical and High" priority strategies and projects	VDEM Mitigation Staff Strategy & Project Sponsors	Summer, 2006 complete Summer, 2007 Summer, 2008 Summer 2009
8. Review current regulatory requirements for plan revision	VDEM Mitigation Staff Planning & Policy Sub-committee	Summer, 2008
9. Refine planning process and timeline for new plan development.	VDEM Mitigation Staff Planning & Policy Sub-committee	Fall 2008



6.3 Project Closeout

“Project closeout” is the process that finalizes a completed mitigation project that FEMA has funded. Closeout will be conducted based on FEMA Region III closeout procedures. FEMA-funded projects will continue to be closed out in accordance with national and regional FEMA guidance along with Commonwealth of Virginia VDEM financial management procedures.

Projects and activities funded through other federal or state grant programs, state general funds or that can be achieved without targeted funding will be completed as dictated by the funding source or state program with administrative oversight for the activity of the project.

6.3.1 Required Closeout Documents from the Commonwealth with Closeout Request Letter to FEMA:

1. Letter from Governor’s Appointed Representative (GAR) requesting close out. Request indicates project completion and that further cost adjustments will not be required.
2. Audit (inspection) verification.
3. Listing of 404 funds distributed for project.
4. SF 269 *Financial Status Report* (or equivalent) if SF 424 was submitted for the project.

6.3.2 Documents Maintained by the Commonwealth for Project Closeout

1. Description of completed project, including AS BUILT designs for structural projects.
2. Assurances that post-award requirements identified in Environmental Review Letters were met, if required.
3. Budget itemization of expended funds, including local matches.
4. Receipts, vouchers and other verification of expenses.
5. Duplication of benefit verification (for acquisition projects).
6. Verification of deed restrictions (for acquisition projects).
7. Post-award correspondence.
8. Additional pertinent items identified as needed.

6.3.3 Close-out Process Guidelines

1. Applicant (Sub-grantee) requests a final project inspection from the Commonwealth (for final payment).
2. Commonwealth performs final inspection and project review (in cooperation with FEMA, who may attend).



3. Final Budget Adjustment:
 - a. If applicant requests an overrun at project completion:
 - i. If Commonwealth approves, request is submitted to FEMA.
 - ii. IF FEMA approves, funds are obligated and Commonwealth is notified.
 - iii. If overrun is denied, funds will be de-obligated.
 - iv. For several projects having the same sub-grantee, de-obligation may be delayed until all projects are complete.
4. Commonwealth submits closeout letter package to FEMA.
5. FEMA reviews closeout package; may request additional information.
6. FEMA sends acknowledgement letter to Commonwealth and requests concurrence for project costs and sub-grantee administrative costs.
 - a. Commonwealth and FEMA may resolve any discrepancies in final project costs and sub-grantee administrative costs.
 - b. Date of signed concurrence memo is used as a project completion date.
7. FEMA notifies Commonwealth that project is complete and that no quarterly reports are required.

